INDUSTRY BRIEF QUESTIONS & ANSWERS

Q: Where does the Government anticipate integration being performed?
a. on Government facilities?
b. contractor facilities?
c. combination?

A: The Government has no preconceptions on where the integration is performed. The contractor should make a proposal based upon knowledge of their own capabilities and the capabilities of the Government facilities toured during the site visits, December 9th and 11th. The government expects to leverage existing facilities at both industry and government sites.

Q: What type contract does the Government anticipate?

A: Cost plus award fee.

Q: The statement was made that as the program transitions from Phase II to Phase III, there would probably become less GFE. Was the statement made with respect to hardware or software?

A: The statement was made with respect to hardware. However, the mix of Government furnished vs. contractor procured hardware and software will be evaluated by the team (both government & industry) to determine the best approach.

Q: It is hard to understand what the System Integrator does in the Lab Integration, Installation, Operational Installation. Does the contractor actually manage that effort or merely document what's required to do these things?

A: We anticipate the TCS Program will provide the System Integration contractor with initial installation dates, installation types (ship, TOC, etc.) and installation locations. The System Integration contractor will plan, manage and conduct the integration, installation and checkout of the TCS. Thereafter, the System Integration Contractor will facilitate the coordination of future installations based on Warfighter priorities and funds, as well as plan, manage and conduct the integration, installation and checkout of the TCS.

Q: What level of security will be required? What is the facility security requirement?

A: The level of security is driven by the C4I systems which the TCS interfaces with. However, the integration lab is not necessarily required to contain these systems. C4I interface checkout may initially be performed with simulations that carry a lower security requirement. C4I certification may be conducted at other sites in the field and at sites TBD by the government.

Q: Please provide best guess on when the RFP will be released.

A: March 1998

Q: Will a complete system (TCS to Air Vehicle) be provided to the System Integrator site for installation testing (versus installation testing)?

A: The components that will make up the TCS will be provided or identified to the System Integration contractor. The hardware and software components of TCS will be provided to or procured by the contractor. These elements will then be integrated into the appropriate LRIP systems. For Army systems, this will be CHS-X and for Navy TAC-X. Air Vehicles will not be provided to the contractor as part of the system integration. The government is interested in feedback regarding simulations required for the air vehicles and C4I systems to support the integration and TCS components required by the System Integration contractor at their site.

Q: Does the System Integrator conduct integration or just manage it?

A: The System Integration contractor will plan, manage and conduct the integration, installation and checkout of the TCS.

Q: Does the System Integrator correct any design deficiencies?

A: Design deficiencies discovered by the System Integrator will be fed back to the System Requirements, Analysis and Design IPT for action. A process for this situation is in place. The System Integrator, as directed by the Program Office, may be required to correct design deficiencies that are traced to TCS core, or TCS integration interfaces, or interoperability integration and interface.

Q: Do you have a geographic location preference for the Integration Contractor?

A: No.

Q: Which IPT defines TCS systems architecture?

A: The System Requirements, Analysis & Design *(RAD)* IPT, System Development IPT, Software IPT and the Systems Engineering IPT. The Systems Engineering IPT is ultimately responsible for the systems architecture. The RAD IPT performs the requirements analysis and initial functional allocation. The software IPT and the System Development IPT implement the software and hardware requirements and detailed systems architecture design. All other IPTs influence the detailed design through the systems engineering process.

Q: Under this plan who (what organization) has total system responsibility?

A: The TCS Program Office (i.e., TCS Integrated Product Team structure) has total system responsibility. TCS includes a significant amount of COTS and GOTS along with associate air vehicle manufacturers data control modules for air vehicle control and backward compatibility to legacy interface systems. The IPT structure facilitates a process for total system responsibility and configuration management for the TCS which is a truly interoperable based system.

Q: Who if any non-hardware contractors are supporting the program? Who are the current contractor team members?

A: The TCS has multiple contractors supporting the Program Office, the SIL and NSWCDD.

Q: What role does Battlespace Inc. have?

A: Battlespace Inc. is supporting the Warfighting Planning Group IPT.

Q: Is implied in the System Integration contract that the System Integrator has to make TCS work?

A: The TCS has been in development for over a year. There is a process in place to implement and refine the requirements, identify the hardware, develop the software and test the system. A CDR will be conducted in 1998 to baseline the configuration for the LRIP systems. This baseline will be the design forwarded into the system integration contract and for the six LRIP systems. As stated earlier, if Phase II testing reveals a problem, that problem will be entered into the trouble reporting system for assessments and resolution.

Q: What is the relationship between the integration contractor, the services (Army, Navy, etc.) and the PEO(CU).

A: The PEO(CU) will be the interface between the services and the System Integration contractor. As stated at the brief, the TCS effort is an integrated government/industry team. Therefore, the System Integration contractor may be required to work with the services in an Integrated Product/Process Team environment.

Q: Please define CWAN network:
who runs it?
hardware environment?
who builds interface?
where do we get engineering information?

A: The CWAN (Coalition Wide Area Network) was an ad-hoc network installed for the Joint Warrior Interoperability Demonstration 1997 (JWID 97). At the conclusion of the exercise, the network was dismantled. If further information is still desired please contact NSWCDD.

Q: What level of user training is anticipated for the LRIP systems, and will the integrator be responsible for it?

A: TCS has an ORD requirement to provide embedded, interactive training for the operator and maintainer. It is anticipated that the System Integrator will be part of the Training IPT. An initial training plan will be in place for implementation at Phase II. We do not anticipate the Systems Integrator providing Training during Phase II.

Q: Who decides which component has control of the TCS in any given operational situation?

A: The US Atlantic Command (ACOM) is leading a Warfighting Planning IPT. This is a group made up of representatives from the services and the warfighting CINCs. This group will make recommendations on the deployment and use of TCS and UAV assets. The final decision will be made by the CINC or his/her designated individual.

Q: How impactful (sic) will the results/recommendations of the NATO industry analysis group be on the direction to the TCS contractor?

A: The TCS program will receive the results of this study and the TCS technical community will evaluate the study. The Systems Integration contractor will be part of the over all IPT structure and therefore have a role in this evaluation process. The direction to implement any changes to the TCS

system will be made by the TCS program office in conjunction with the services and requirements community, by considering the cost, technical benefits, operational benefits, schedule, and logistic effects.

Q: Are all US company participants in this group (NATO) be allowed to bid on contractor?

A: Yes

Q: How important is it to have an office at PAX River (can significant work be performed at other geographical locations)?

A: It is not necessary to have an office at PAX River.

Q: What percentage of TCS unique software development is really required?

A: The TCS program office will maintain control of software development. Any TCS software development done by the Systems Integration contractor will done at the direction of the Software IPT and concurrence of the TCS program office.

Q: Will attendance list for today be provided?

A: The attendance list for the industry brief will be posted on the TCS web page.

Q: As a DARO program, what is the impact of DCGS (also DARO) or the IES aspects of the TCS system?

A: The CIGGS and DCGS is an architecture in the early stages of development. Currently, TCS is developing to existing military standards such as DII COE. TCS is a part of the overall DARO architecture and is implementing elements of this architecture for UAV interoperability.

Q: What's the relationship between contractor doing System Integration and MICOM SIL?

A: MICOM (JTC/SIL) along with NSWCDD are the lead DOD labs for TCS development. As such, the JTC/SIL has personnel on the various IPTs. The SIL is a facility that is available to support TCS integration. The capabilities of the SIL will be briefed at the site visit.

Q: Is the DCM hardware common to all UAVs?

A: DCM hardware is not required to be common, however; the DCMs are required to comply with the TCS "H/W Spec" and meet the Air Vehicle Standard Interface (AVSI).

Q: Is the Data Link hardware common?

A: The TCS must be interoperable with legacy systems and future systems. For legacy system, the data links are not common. As TCDL is fielded, the data links will become common.

Q: Is the TCS compatible with dual channel DCMs (2 DCMs)?

A: Yes. TCS must be interoperable with multiple types of UAVs and their associated DCMs.

Q: It was said that the human interface is not very different between UAVs. Does this mean that there may be some differences?

A: Yes.

Q: The Navy just released an RFP for VTOL UAV performance demo flight, including options which include integration with TCS. Are you aware of this plan to support that effort?

A: Yes. The TCS Program Office helped write the TCS integration option.

Q: It was said that we don't change the UAVs. So, who/how do we impose?

A: The TCS requirement is to be compatible with the existing data links for each UAV that is integrated into the system. In addition, DOD has existing programs attempting to standardize data link hardware, protocols, etc. The TCS community has to be aware of these efforts, understand the impacts on TCS of these efforts so that TCS can implement these new capabilities when they become operational and the UAV programs include them as part of their system.

Q: Does JPO UAV or TCS PM have a designated or favorite comm. hardware?

A: No.